The Association Between Length of Stay in Canada and Intimate Partner Violence Among Immigrant Women

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Objective. We examined the prevalence of intimate partner violence (IPV) among recent (0–9 years) and nonrecent (≥10 years) immigrant women in Canada to determine whether differences in IPV were associated with length of stay in Canada.

Methods. We analyzed data from the 1999 General Social Survey, a national cross-sectional telephone survey. We used weighted logistic regression analysis to examine the effect of length of stay in Canada on IPV and controlled for sociocultural and other factors associated with IPV.

Results. The crude prevalence of IPV was similar among recent and nonrecent immigrant women. However, after adjustment, the risk for IPV was significantly lower among recent immigrant women compared with nonrecent immigrant women. Country of origin, age, marital status, and having an activity limitation (physical/mental disability or health problem) also were associated with a higher risk for IPV.

Conclusions. Our findings have important implications for both prevention and detection of IPV among immigrant women. (*Am J Public Health.* 2006;96:654–659. doi:10.2105/AJPH.2004.046409)

Violence against women is a major public health and human rights problem throughout the world.[1] Although there are many forms of violence, including violence against men, we specifically examined intimate partner violence (IPV) against women, which is defined as the experience or threat of physical or sexual violence and/or financial or psychological/emotional abuse by a current or ex-partner.[2] According to the 1999 General Social Survey (GSS) on victimization, 8% of Canadian women who were married or were living with a common-law partner experienced physical or sexual abuse and 19.6% experienced emotional or financial abuse, by a current or ex-partner on at least 1 occasion during the 5 years preceding the survey.[3] Cohen and Maclean used the same data set and found that immigrant women in Canada reported significantly lower rates of all types of IPV compared with Canadian-born women.[4] However, differences in IPV rates within the immigrant population, categorized by length of stay in Canada, were not examined.

It is well recognized that immigrant women are not a homogeneous group and that factors such as length of stay, country of origin, age at immigration, and home language influence both life circumstances and health.[5,6] Many studies have suggested that the proportion of immigrants who engage in health risk behaviors, such as smoking and alcohol abuse, increases as length of stay in the adopted country increases.[5,7,8] Other studies have suggested that social and stress-related determinants of immigrant health change over time.[5,9] For example, a study of acculturation and birth outcome found that nonrecent immigrant Southeast Asian women reported lower levels of social support and higher levels of stress compared with recent immigrant women.[10] However, little research has examined whether rates of IPV change among immigrant women depending on their length of stay in the adopted country. This type of information is critical for the prevention and detection of IPV in immigrant communities.

Factors associated with IPV include age,[11–13] marital status,[12,13] level of education,[14–17] presence of children in the household,[11,12] income,[12] and activity limitation (physical/mental disability or health problem).[13,18] Our goal was to assess the prevalence of IPV among recent and nonrecent immigrant women in Canada with a large population-based representative sample. We also wanted to determine whether rates of IPV were associated with length of stay in Canada.

METHODS

Our study included a secondary analysis of data from the 1999 GSS, a national, cross-sectional, and voluntary telephone survey that has been conducted by Statistics Canada since 1985. In 1999, the GSS focused on violence and victimization.[19] The target population was men and women aged 15 years and older who lived in private households within the 10 Canadian provinces. The provinces were divided into 27 geographical areas or strata, and the sample was selected with random digit dialing.[20] After a household was successfully contacted, 1 eligible individual within the household was randomly selected to be interviewed. Interviews were conducted between February and December 1999 and were administered in English or French. The overall response rate for the survey was 81.3%; the total sample comprised 25 876 respondents.

Intimate Partner Violence

We focused specifically on IPV against immigrant women by a current or ex-partner within the 5 years before the date of the survey. Physical and sexual forms of IPV were measured with a modified version of the Conflicts Tactics Scale.[21] Physical violence was assessed by asking respondents whether a current or ex-partner (1) threatened to hit; (2) threw something; (3) pushed, grabbed, or shoved; (4) slapped; (5) kicked, bit, or hit; (6) hit with something that could hurt; (7) beat up; (8) choked; or (9) threatened to use a knife or gun. Sexual violence was assessed by asking respondents, "Has your partner (or ex-partner) forced you into any unwanted sexual activity by threatening you, holding you down, or hurting you in some way?"

Emotional abuse was defined as having occurred if a respondent answered affirmatively

to at least 1 of the following statements about their partner or ex-partner: "He tried to limit your contact with family or friends; put you down or called you names to make you feel bad; was jealous and didn't want you to talk to other men; harmed, or threatened to harm, someone close to you; demanded to know who you were with and where you were at all times; and, damaged or destroyed your possessions or property."[19] Financial abuse was defined by the question, "Has your partner prevented you from knowing about or having access to the family income, even if you asked?"[19] Response categories for questions assessing abuse were yes/no. We examined each type of abuse (physical, sexual, emotional, and financial) and, for some analyses, we examined the combined effect (i.e., reporting at least 1 type of abuse was termed *any IPV*).

Study Population

The study population comprised immigrant women in Canada. The GSS assessed immigration status by asking respondents to indicate their source country (country of birth). Responses were grouped into 2 categories: born in Canada and born outside of Canada. Participants not born in Canada were asked to indicate what year (categorized into ranges) they came to live permanently in Canada. From this variable, length of stay was derived. Recent immigrants were defined as having lived in Canada 0 years to 9 years, and nonrecent immigrants were defined as having lived in Canada 10 years or more. This definition of *recent* has been used in other provincial and national studies of Canadian immigrants.[5,7,22]

Other factors that contribute to immigrant heterogeneity were defined with the GSS data set. These included source country (born in North American/European countries or born in other countries, i.e., Asian, African, and Central and South American countries), age at immigration to Canada (0–19 years or ≥20 years), and household language (English and/or French or other language). These variables were broadly defined because less aggregated information was not available.

Factors Associated With IPV

Factors associated with IPV were defined with the GSS data set. These included age (15–24 years, 25–34 years, 35–44 years, 45–54 years, or ≥55 years), marital status (married/common-law partner, divorced/separated/widowed, or single), education (>high school, or ≤high school), annual household income in 1999 Canadian dollars ($0–$29 999, $30 000–$49 999, or ≥$50 000), presence of children aged 14 years or younger living in the household (0 or ≥1). The GSS assessed activity limitation by asking, "Does a long-term physical or mental condition or heath problem reduce the amount or the kind of activity that you can do at home, at school, at work, or in other activities?" Long-term was defined as at least 6 months. Response categories were often, sometimes, or never; respondents who answered often or sometimes were considered to have an activity limitation.

Statistical Analysis

Analyses were conducted with the Public Use Microdata File (Main File) from Statistics Canada. All analyses were weighted according to Statistics Canada's guidelines to ensure that the findings were representative of the Canadian population as a whole.[3]

We first compared recent immigrant women with nonrecent immigrant women on sociodemographic and other factors associated with IPV. The analyses were conducted with a χ^2 test for categorical variables. We next compared groups on the prevalence of different types of IPV (emotional, financial, physical, sexual, and any IPV) by a current or ex-partner during the previous 5 years. We again used the χ^2 test for all analyses because variables were categorical.

To determine whether the risk for any IPV was associated with length of stay in Canada, we conducted a weighted multivariate logistic regression analysis. Variables included in the multivariate model were on the basis of theoretical relevance. All variables were examined for multicollinearity.[23] The Hosmer–Lemeshow χ^2 test on an unweighted model was used to assess the model's fit. We used the c-statistic—equivalent to the area under a receiver-operator curve—to examine the discrimination ability of the logistic regression model. The value of the c-statistic ranges from 0 to 1 and approaches 1 for a model with higher predictive accuracy.[23]

For most variables, the proportion of missing values was less than 1%, and the missing records were omitted. However, for household income, the proportion of missing data was 28.6%. To retain our sample size in the multivariate model, household income was recategorized into 3 subgroups: <$30 000 (prime), ≥$30 000, and missing data (income not stated by the respondent [26.5%] and income unknown [2.1%]). Marital status was collapsed into a dichotomous variable to adjust for small sample sizes in some categories (married/living with a common-law partner and single/divorced/separated/widowed). Analyses were conducted with Stata software, version 7.0 (Stata Corp, College Station, Tex). A P value of .05 was considered statistically significant; all tests of significance were 2-tailed.

RESULTS

Of the 25 876 respondents in the 1999 GSS, 14 269 were women. Data were available on source country and year of immigration for 13 590 women, 8842 of whom had had contact with a current or ex-partner within the previous 5 years. Of these women, 1596 (18%) were immigrants, and within this group, 389 (24.4%) were recent immigrants and 1207 (75.6%) were nonrecent immigrants. The proportion of immigrant women was similar to the 2001 Canadian Census, but the proportion of recent immigrant women was lower (33.6%).[24]

There were significant differences in sociodemographic factors between recent and nonrecent immigrant women (Table 1). Recent immigrant women were more likely to be younger, married, have a higher education, have no income or a lower income, and have children living in the household, and they were less likely to have an activity limitation. Compared with nonrecent immigrant women, recent immigrant women were less likely to speak English and/or French at home and to have immigrated at younger ages (0–19 years), and they were more likely to have been born in non-Western countries (i.e., Asian, African, and Central and South American countries).

The crude prevalence of all types of IPV was similar among recent immigrant women compared with nonrecent immigrant women

TABLE 1—Descriptive Weighted Analysis of the Study Population

	Recent Immigrants (0–9 y) N = 389[a]	Non-Recent Immigrants (≥10 y) N = 1207[a]	*P*
	N (%)	N (%)	
% of population	389 (23.5)	1207 (76.5)	
Age group			
15–24 y	18 (4.9)[b]	… (0.4)[c]	<.0001
25–34 y	151 (40.3)	139 (11.4)	
35–44 y	135 (36.0)	292 (23.9)	
45–54 y	45 (12.1)	343 (28.1)	
≥55 y	26 (6.8)[b]	442 (36.2)	
Marital status			
Married/common-law	359 (95.8)	1090 (89.9)	0.0001
Divorced/separated/widowed	… (3.4)[b]	98 (8.1)	
Single	… (0.8)[c]	24 (1.9)[b]	
Education			
>High school	233 (64.4)	584 (49.1)	<.0001
≤High school or less	129 (35.6)	606 (51.1)	
Household income			
$0–$29 999	97 (25.9)	201 (16.4)	<.0001
$30 000–$49 999	79 (21.1)	234 (19.1)	
≥$50 000	78 (21.0)	426 (34.9)	
Missing data	120 (32.1)	361 (29.5)	
Children in household aged 0–14 y			
0	158 (42.2)	858 (70.3)	<.0001
≥1	217 (57.8)	363 (29.7)	
Activity limitation	27 (7.3)[b]	190 (15.9)	0.001
Household language			
English and/or French only	86 (23.3)	762 (63.7)	<.0001
Other	284 (76.7)	434 (36.3)	
Age group at immigration			
0–19 y	28 (7.3)[b]	534 (43.7)	<.0001
≥20 y	348 (92.7)	687 (56.3)	
Source country			
Born in North America/Europe	123 (33.0)	849 (69.8)	<.0001
Born in other country	249 (67.0)	367 (30.2)	

Note. [a]Number of unweighted records used in the analyses.
[b]Coeffecient of variation is high.
[c]Coeffecient of variation is very high.

(Table 2). Recent and nonrecent immigrant women, respectively, were equally likely to have experienced emotional abuse (15.3% vs 17%), financial abuse (2.5% vs 3.3%), physical abuse (5.5% vs 6.5%), sexual abuse (0.8% vs 1.1%), and any IPV (17.4% vs 18.8%) by a current or ex-partner during the previous 5 years. However, the age-adjusted odds ratio (OR) for any IPV was 0.55 (95% confidence interval [CI]=0.38, 0.79), which suggested that recent immigrant women experienced significantly lower rates of IPV compared with nonrecent immigrant women.

To determine whether the risk for IPV was indeed associated with length of stay in Canada, we conducted weighted multivariate logistic regression analyses (Table 3). Model fit was assessed by the Hosmer–Lemeshow χ^2 test ([χ^2] 8df=6.95; P=.54) and the c-statistic (0.75) and was found to be acceptable.

After adjustment, the odds for experiencing any IPV by a current and/or ex-partner during the previous 5 years was lower among recent immigrant women compared with nonrecent immigrant women (OR=0.57; 95% CI=0.38, 0.87). The strongest risk factor for IPV was marital status: women who were single, divorced, separated, or widowed were 10 times more likely to report IPV compared with women who were married or were living with a common-law partner. Women who had activity limitations were more than twice as likely to report IPV compared with women who did not have activity limitations. The risk for IPV also was associated with a 4% reduction in risk with each year of age. Having been born in non-Western countries was associated with a higher risk for IPV.

Because age at the time of the interview was analyzed as a continuous variable, and age at immigration and length of stay were analyzed categorically, the problem of collinearity between age-related variables was reduced. The final model excluded age at immigration, but the results we obtained from the 2 approaches were similar.

DISCUSSION

Although there has been an increase in Canadian research on IPV, including IPV against men and within same-sex relationships, little research has examined whether differences in rates of IPV within immigrant populations vary with length of stay. Our study results indicated that after we controlled for age and other factors in the multivariate logistic regression analysis, the odds for experiencing any IPV by a current and/or ex-partner during the previous 5 years was lower among recent immigrant women compared with nonrecent immigrant women. In 1 IPV study of the prevalence of physical abuse among Hispanic immigrants in the United States, Lown and Vega also found that a longer length of stay in the United States and US-born status were associated with higher rates of IPV.[25]

Findings from other migrant studies can be used to speculate on why the risk for IPV is lower among recent immigrant women compared with nonrecent immigrant women. Some

TABLE 2—Weighted Analysis of the Prevalence of IPV Among the Study Population

	Recent Immigrants (0–9 y)		Non-Recent Immigrants (≥10 y)	
Type of IPV	N	% (95% Confidence Interval)	N	% (95% Confidence Interval)
Emotional	54	15.3 (11.8, 19.6)	197	17.0 (14.8, 19.6)
Financial	. . .	2.5[a] (1.4, 4.4)	38	3.3 (2.4, 4.4)
Physical	19	5.5[b] (3.6, 8.1)	76	6.5 (5.1, 8.3)
Sexual	. . .	0.8[a] (0.3, 2.3)	. . .	1.1[a] (0.7, 1.8)
Any IPV	61	17.4 (13.7, 21.9)	218	18.8 (16.5, 21.4)

Note. IPV = intimate partner violence.
[a]Coeffecient of variation is very high.
[b]Coeffecient of variation is high.

TABLE 3—Weighted Multivariate Logistic Regression Analysis of Factors Associated With Any IPV in the Study Population

Factor	Odds Ratio (95% Confidence Interval)
Length of stay in Canada	
0–9 ys	0.57 (0.38, 0.87)
≥10 ys	1.00
Source country	
Born in North America/ Europe	1.00
Born in other country	1.57 (1.10, 2.25)
Household language	
English and/or French only	1.00
Other	1.07 (0.76, 1.51)
Age	0.96 (0.95, 0.98)
Marital status	
Married/common-law	1.00
Single/divorced/ separated/ widowed	10.24 (6.75, 15.54)
Children aged 0–14 y in household	
No	1.00
Yes	1.20 (0.83, 1.73)
Household income	
≥$30 000 or more	1.00
<$30,000	1.05 (0.68, 1.62)
Missing data	0.96 (0.63, 1.47)
Education	
>High school	1.00
≤High school or less	1.18 (0.84, 1.64)
Activity limitation	
No	1.00
Yes	2.33 (1.45, 3.74)

studies have suggested that risk behaviors associated with IPV, such as alcohol and drug use, increase with length of stay in the adopted country[5,7,8] because of alienation from traditional support systems, perceived discrimination, and acculturative stress.[26] Other studies have suggested that postmigration stresses, such as poverty, underemployment, loss of status, and discrimination, affect the power dynamics between men and women and thus, increase women's risk for IPV.[27–29] Alternate explanations do not relate to behavioral or social determinants but rather reflect changing perceptions and interpretations of IPV as newcomers learn what acts constitute abuse in the context of the adopted country and develop the language skills necessary for identifying and speaking about their experiences. If so, then previous cultural norms of what is considered abusive behavior change over time to accommodate new constructs, which may result in higher reported rates of IPV.

Our finding that an immigrant's source country was associated with the risk for IPV requires further investigation to understand this association comprehensively. Throughout much of the 20th century, the majority of immigrants to Canada were from the United Kingdom, United States, and Europe—so-called traditional source countries. However, by 2000 the majority of immigrants to Canada were from nontraditional source countries: Asian and Pacific countries (53%), African and Middle Eastern countries (19.2%), and South and Central American countries (8%). Only 19.7% of immigrants came from traditional source countries.[6] In their analysis of the 1999 GSS, Brownridge and Halli found the prevalence of IPV to be highest among immigrant women from nontraditional source countries, intermediary among Canadian-born women, and lowest among immigrant women from traditional source countries.[30] The authors suggested that IPV may be more common in nontraditional source countries where cultural values, including social mores and religious beliefs, dictate male dominance in gender relationships and create separate codes of conduct for men and for women.[30,31] However, immigrants from developing countries do not necessarily maintain more traditional, patriarchal elements of their source countries. According to Natarajan, many of these immigrants are from privileged groups and are well-educated, economically self-sufficient, and have previous exposure to Western values.[32]

Other sociodemographic factors significantly associated with IPV that we observed, most notably age and marital status, were consistent with other studies.[25] Previous research also has suggested that rates of IPV were significantly higher among women who had activity limitations compared with women who had no activity limitations.[33] Even though they were proportionately poorer, levels of education were higher among recent immigrant women compared with nonrecent immigrant women and Canadian-born women as a whole. This trend has been frequently reported among immigrants to Canada and has been attributed to discrimination, language barriers, and nonrecognition of foreign work credentials.[5,34]

Several study limitations must be noted. First, by using secondary data for our analyses, our final model of factors associated with IPV among immigrant women in Canada excluded several risk factors associated with physical IPV (e.g., pregnancy,[35,36] perpetrator drinking, and previous abuse by the same perpetrator on another occasion[37]). The inclusion of other hypothetical risk and protective factors associated with IPV among immigrant women (e.g., social isolation, status inconsistency, and gender role conflicts) also may have reduced the observed effect of length of stay on the prevalence of IPV.

Second, because of the sensitive nature of IPV, not all abused women will acknowledge or define their experiences with their partners as abusive in population surveys. This may be particularly true for certain minority cultural

communities,[38–40] where factors such as fear of reprisal, concern for privacy, protecting the offender, perception of the incident as minor, and traditional values that emphasize close family ties and harmony may discourage disclosure and thus, lead to underestimates in prevalence.[17] However, no research has examined immigrant women's preferences for disclosing information on IPV or whether response rates are higher with phone or face-to-face interviews.

Third, use of the Conflict Tactics Scale[21] to measure the prevalence of IPV has been criticized, most notably for its lack of attention to women's subjective perceptions and sociocultural contexts of abuse.[31] Inconsistencies and variations in rates of IPV across immigrant and visible minority groups have sometimes been attributed to group differences in the definitions or perceptions of IPV depending upon culture of origin and the recognition that some women may not consider some acts to be violent.[40,41] On the other hand, although the cultural validity of the Conflict Tactics Scale has not been assessed, experts agree that asking respondents direct questions about their experience with specific acts of violence is accurate, and these questions are currently being used in the World Health Organization's multicountry study on women's health and domestic violence.[1]

Fourth, immigrants to Canada are extremely heterogeneous with respect to source country, length of stay, reason for migration, and official language fluency. The GSS lacked specific information on country of birth; therefore, we had to rely on variables that represented previously aggregated data, for example, region of origin. It also did not ask whether the participant was an immigrant or a refugee, and it excluded women who could not participate in languages other than English and French. It is possible that the prevalence of IPV may be higher among immigrant women who do not speak English and French because of increased social isolation and dependency on partners,[42,43] but empirical data are lacking.

Finally, because respondent variables were asked about in current time and IPV was asked about in the recent past, variables such as marital status, income, education, and employment may have changed over the 5-year time frame and may not necessarily have been the same as at the time of abuse. Although it is unlikely that there would be a large number of changes in personal characteristics for most respondents, without a longitudinal design, caution must be exercised when interpreting the association between current sociodemographic variables and IPV in the past.

Our study is among the first to examine the prevalence of IPV among recent and nonrecent immigrant women with a large population-based representative sample. Our findings have important implications for prevention and detection of IPV in immigrant communities. It has frequently been assumed that newcomers constitute a higher risk group than more established immigrants, but our findings imply that it is not necessarily the recentness of immigrant status that contributes to this risk. Rather, our findings suggest that the risk for IPV is higher during later periods of the resettlement process. Thus, prevention efforts in immigrant communities must consider immigrants who are at various stages of resettlement. Recent immigrants may need to be more aware of changes associated with stress and conflict to prevent future marital conflict and/or IPV. It also seems clear that violence prevention campaigns must focus on mediating the experiences of nonrecent immigrants that increase their risk for IPV.

Future research is necessary to confirm our study findings. This will require more focused methodologies that use culturally validated instruments and longitudinal designs to examine whether changes in perceptions of IPV over time parallel changes in prevalence. If these findings are replicated, future research will then be necessary for better understanding why rates of IPV are lower among recent immigrant women compared with nonrecent immigrant women and for identifying risk and protective factors associated with IPV among these women. ■

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Contributors

I. Hyman originated the study, synthesized the analyses, and led the writing. T. Forte assisted with the writing and completed the analyses. All the authors assisted with originating ideas, interpreting findings, and reviewing drafts of the article.

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